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16

RAW SEQUENCE LISTING

DATE: 12/19/2003

PATENT APPLICATION: US/09/680,121C

TIME: 16:00:51

Input Set : A:\Amended Sequence Listing for 107-206-C-D.txt

Output Set: N:\CRF4\12192003\I680121C.raw

```
3 <110> APPLICANT: FRENCH, Cynthia K.
        YAMAMOTO, Karen K.
        EL SHAMI, A. Said
 7 <120> TITLE OF INVENTION: Prostate Cancer-Specific Marker
9 <130> FILE REFERENCE: 107-206-C-D
11 <140> CURRENT APPLICATION NUMBER: 09/680,121C
12 <141> CURRENT FILING DATE: 2000-10-04
14 <150> PRIOR APPLICATION NUMBER: 60/041,246
15'<151> PRIOR FILING DATE: 1997-03-07
17 <150> PRIOR APPLICATION NUMBER: 60/047,811
18 <151> PRIOR FILING DATE: 1997-05-15
20 <150> PRIOR APPLICATION NUMBER: 09/036,315
21 <151> PRIOR FILING DATE: 1998-03-06
23 <150> PRIOR APPLICATION NUMBER: 09/535,597
24 <151> PRIOR FILING DATE: 2000-03-27
26 <150> PRIOR APPLICATION NUMBER: 09/680,121
27 <151> PRIOR FILING DATE: 2000-10-04
29 <160> NUMBER OF SEQ ID NOS: 27
31 <170> SOFTWARE: PatentIn Ver. 2.1
                                                    ENTERED
33 <210> SEQ ID NO: 1
34 <211> LENGTH: 3891
35 <212> TYPE: DNA
36 <213> ORGANISM: Homo sapiens
38 <220> FEATURE:
39 <221> NAME/KEY: CDS
40 <222> LOCATION: (151)..(1425)
42 <220> FEATURE:
43 <223> OTHER INFORMATION: product = Repro-PC-1.0
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48 cgttccgaaa gccggcgctt gagatccagg caagtgaatc cagccaggca gttttccctt 120
50 cagcacctcg gacagaacac gcagtaaaaa atg gct ccg atc acc acc agc cgg
                                    Met Ala Pro Ile Thr Thr Ser Arg
                                                                     222
54 gaa gaa ttt gat gaa atc ccc aca gtg gtg ggg atc ttc agt gca ttt
55 Glu Glu Phe Asp Glu Ile Pro Thr Val Val Gly Ile Phe Ser Ala Phe
                            15
                                                                     270
58 qgc ctq qtc ttc aca qtc tct ctc ttt gca tgg atc tgc tgt cag aga
59 Gly Leu Val Phe Thr Val Ser Leu Phe Ala Trp Ile Cys Cys Gln Arg
                                            35
60 25
                        30
62 aaa tca tcc aag tct aac aag act cct cca tac aag ttt gtg cat gtg
                                                                     318
63 Lys Ser Ser Lys Ser Asn Lys Thr Pro Pro Tyr Lys Phe Val His Val
64
                    45
                                        50
```

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Output Set: N:\CRF4\12192003\I680121C.raw

					Out	.puc	sec.	14.	CRE	. \121	. 9200	)	30012	210.1	.aw			
6	6	ctt	aaα	gga	gtt	gat	att	tac	cct	gaa	aac	cta	aat	agc	aaa	aaq	aaq	366
					Val													
	8		-1-	- 2	60	•		•		65					70	-	-	
7	0	ttt.	qqa	gca	gat	gat	aaa	aat	gaa	gta	aag	aat	aag	cca	gct	gtg	сса	414
					Asp													
	2		-	75	-	-	_		80					85				
7	4	aag	aat	tca	ttg	cat	ctg	gat	ctt	gaa	aag	aga	gat	ctc	aat	ggc	aat	462
					Leu													
7	6		90					95					100					
					acc													510
			Pro	Lys	Thr	Asn		Lys	Pro	Gly	Ser		Ser	Asp	Leu	Glu		
		105					110					115					120	
					aag													558
8	3	Ala	Thr	Pro	Lys		Phe	Leu	Glu	Gly		Lys	Glu	Ser	Val		Pro	
	4					125					130					135		606
					aag													606
		Glu	Ser	Leu	Lys	Ser	Ser	Thr	Ser		Thr	Ser	GIU	GIU		GIN	GIU	
	8				140		4.4			145					150	. ~ .		654
					act													654
	) <u>1</u> ) 2	гàг	Leu	155	Thr	ьeu	Pne	Pne	160	ьeu	GIU	ıyı	ASII	165	GIU	Arg	гуз	
		~~~	+++		gtc	22±	a+c	224		acc	cat	aac	tta		acc	ata	cat	702
					Val													702
	,,, 16	Ата	170	vaı	vaı	ASII	TTE	175	Giu	лια	Arg	ОТУ	180	110	2320	1100	nop .	
-	_	gag		tca	atg	acc	tct		'cca	tat	atc	aaa		acα	atc	ctc	cca	750
					Met													
		185					190			- 1 -		19!					200	
				aac	g cat	aaa	gto	aaa	act	. aga	gto	g cto	g aga	a aaa	a aco	c tto	g gat	798
																	ı Asp	
1	04					205	•				210	)				21	5	
																	c caa	846
1	.07	Pro	Ala	a Phe	e Asp	Glu	Thr	Phe	Th:			c Gl	y Il	e Pro			r Gln	
	.08				220					225					230			
																	gttt	894
			e Glr			ı Ala	Lev	His			: Ile	e Lei	ג Se:			o Ar	g Phe	
	.12			23	_				240					24!				0.40
																	a att	942
			_	-	o Asp	) ITE				ı Val	L Let	1 11¢	e Pro 26	о ге	ı Sei	r GI	y Ile	
	.16		250					255										000
																	g aga	990
				ı Sei	r GIV	т Сту	льуя 270		. ьег	ı met	ASI	27!		u II6	3 116	s rià:	s Arg 280	
		265		- ~~	~ ~~	. + a+				- aat	- ~~			~ a+	- tot	t ata	tgc	1038
																	ı Cys	1030
	.23 .24		ı val	r wr	ч пар	285		. טגן	, wr	9 61)	290 290		ישני	~ 11,		29!		
				t to	- 200			act	· c+=	aact		•	t at	c tt:	9 222		t cga	1086
																	a Arg	1000
	.28				300		1101			305				,	310			
			cto	ı aat			gat	ato	ı too			t toa	a ga	t cc		_	c aaa	1134

RAW SEQUENCE LISTING DATE: 12/19/2003 PATENT APPLICATION: US/09/680,121C TIME: 16:00:51

Input Set : A:\Amended Sequence Listing for 107-206-C-D.txt

Output Set: N:\CRF4\12192003\1680121C.raw

131	His	Leu	Pro	Lys	Ser	Asp	Val	Ser	Gly	Leu	Ser	Asp		Tyr	Val	Lys		
132			315					320					325					
															act		1182	
	Val		Leu	Tyr	His	Ala		Lys	Arg	Ile	Ser		Lys	Lys	Thr	His		
136		330					335					340					1000	
138	gtg	aag	aaa	tgc	acc	ccc	aat	gca	gtg	ttc	aat	gag	ctg	ttt	gtc	ttt	1230	
		Lys	Lys	Cys	Thr		Asn	Ala	Val	Phe		Glu	Leu	Phe	Val			
	345					350					355					360	1070	
142	gat	att	cct	tgt	gag	ggc	ctt	gaa	gat	ata	agt	gtt	gaa	דדד	ttg	gtt	1278	
	Asp	тте	Pro	Cys	365	GTÀ	Leu	GIU	Asp	370	ser	vaı	Glu	rne	Leu 375	vai		
144	++~	~a+	+ 0+	~~~		~~~	too	cas	22t	-	ata	atc	aaa	cad	tta	atc	1326	
															Leu		1320	
148	ъęu	изр	Ser	380	ALG	Оту	Jei	ALG	385	Olu	Val	110	O.L.y	390	DÇ û	, 44		
	tta	aat	aca		пса	gaa	ana	act		gga	gag	cac	taa		gag	atc	1374	
151	Len	Glv	Ala	Ala	Ala	Glu	Glv	Thr	Glv	Glv	Glu	His	Trp	Lvs	Glu	Ile		
152	шси	O ± y	395	111.4		014	027	400		0-1			405	-1-				
	tat	gac		ccc	aαα	aga	caa		acc	aaq	taa	cac	ata	ctc	tgt	gat	1422	
															Cys			
156	2	410	-			_	415			•	-	420			_	_		
158													1475					
159	Gly																	
	425	425										•						
	2 aaattttett tetttetata ttggattgea agettgggaa atcaagetae etttttgtt																	
	ttgttgttgt tgctagaaat ggattgaatt agtagaccag aaagtaactt caaatgtgt																	
	6 ttatgataat ttccctattt attagaagag ttggataaat tttcataaga tattcaat																	
	3 ctccttcaga ttaccagtga tataactagg aatagtcaga cattttatga atactgtg																	
	agaatcccaa attataaatg tgacaatctc attggaacat gtcacaaaaa gttaatgt																	
	2 ttaagattta aaaacgaaaa gtatgeettg eettgtgaaa atttateeat ttatettea																	
	l gttgggggaa atcaattttt ctttaatcca aagatactaa aaaaatgtcc tccagtttg 5 atttattaat tctgtcatgt gcaaatggtt gtcctgcata taaaagtatc tggtcattt																	
	agtttggttt gtaattattt gatgcaattt tatcataaga gtaactcaga ttcatttca aaggacagtg aacaagctga gaaattattt tatcaaaggg ctgagttgag aacactgtg																	
	2 ctgaaatata atttttctcc cccctaaggt tacatgtgag tcaaaatttt gtaaaa 4 acctcacata agaaccatgg ccttggatta ttcactgcct gtcacaagcc tcagtg																	
	o ctgagaaatc cctatgtacc tttgtgaaat tgttgaatta gttagtgaat aaagaaat																	
	B acttcaacta gaaatccagt tagaagtgca attttcttat aggaaatagg tatagtg																	
	D aagtgtactt ttaaggecat egtttgtace cagagtegge atggecaeet aagte																	
												aaaagactgt gaagatttt						
194	tacattgcca gataaaa				aaaa	gt g	ttact	ttaad	ac caacaaacaa			atg	caaga	act	aatcgt	2495		
				ttctaatata a												ggctgtcaaa		
	ttagcacaac aaag				aatgtg tttca			tatc ttttctaggc			taatttgtct tgagctgttg							
200	) tctatagagc			agtttacaga ct			ttgt	gtcti	t gta	gtatcatttt			gtgc	cag	ggtto	2675		
	)2 ttcattcaga									accctgtgat			tatttgaaaa					
				tcactatatt t														
206	gaattattaa atatgcaagt taggttttgtgtc agtactttag cag							attaa	tgaa	aaat	2855							
210	ttc	tatga	aaa a	aatgo	catt	tt c	caaa	caact	t ta	tacat	tgct	ttti	catga	act .	atgc	ctaatg	2975	
212	taaa	agaaa	aat o	gtati	tacat	tt c	tgtat	tgta	c aaa	agati	taaa	aat	caac	ctc	ttttt	ttgtgc	3035	

DATE: 12/19/2003 RAW SEQUENCE LISTING PATENT APPLICATION: US/09/680,121C TIME: 16:00:51

Input Set : A:\Amended Sequence Listing for 107-206-C-D.txt

Output Set: N:\CRF4\12192003\I680121C.raw

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214 tttaaaatga ctttgggatt aaaaaagcat atttcccaat cattgtcttc attccactac 3095
 218 ctgtagtagg tgtgtagttt ggggaagtca aatggccatt ttatgtatgt gcatttggta 3215
 220 tcatgggccg tggaacagaa tatatgttgg acctctgaaa agttgtaagg ggccaaatct 3275
 222 aaqtattett caeggeagee agaagttaat ggtggtagea getgaggtat ggttgttgga 3335
 224 cgaggccgat ttttttttt taacatggaa caatgaaacc aacaacaaac atttttaaaa 3395
 226 ttaaaatqqa taatttgtaa atagttttta gcttttaaaa tttaaagtgt ttttgagtgt 3455
 228 gaaaagttga gtaaaactat ttgcaactgg ttttcagaaa agagaaaaga aacaacaaag 3515
 230 gaattgaaac aggcagggag atcttaatac ctaatttcat catttctgca aaatgtactg 3575
 232 ttttagaatg tattacaata tcaatgtgaa tatcttgaat cctgttacaa atcctgcact 3635
 234 qtattaaaca tqtaaattaa ttqtttqtct gattagccaa tctcaccacc caaatgggga 3695
 236 ggtatacatg tttgaagaac gtgtaactcg gtaattgatt tgttctgatg ttgtaactca 3755
 238 atagaagtgt tttggaagga agcatggtgt gtgagacagt gtctgttctt ttgtgccagc 3815
 240 tctgtatgat gtttgtaaga ccatgtttgt aagacatgaa taaattgctg cttttgccca 3875
                                                                      3891
 242 aaaaaaaaaa aaaaaa
 245 <210> SEQ ID NO: 2
 246 <211> LENGTH: 425
 247 <212> TYPE: PRT
 248 <213> ORGANISM: Homo sapiens
> 249 <220> FEATURE:
  250 <223> OTHER INFORMATION: product = Repro-PC-1.0
  252 <400> SEQUENCE: 2
 253 Met Ala Pro Ile Thr Thr Ser Arg Glu Glu Phe Asp Glu Ile Pro Thr
 256 Val Val Gly Ile Phe Ser Ala Phe Gly Leu Val Phe Thr Val Ser Leu
                                      25
 259 Phe Ala Trp Ile Cys Cys Gln Arg Lys Ser Ser Lys Ser Asn Lys Thr
                                  40
 260
 262 Pro Pro Tyr Lys Phe Val His Val Leu Lys Gly Val Asp Ile Tyr Pro
 265 Glu Asn Leu Asn Ser Lys Lys Phe Gly Ala Asp Asp Lys Asn Glu
                          70
                                             75
  268 Val Lys Asn Lys Pro Ala Val Pro Lys Asn Ser Leu His Leu Asp Leu
                                          90
  271 Glu Lys Arg Asp Leu Asn Gly Asn Phe Pro Lys Thr Asn Leu Lys Pro
  272
                 100
  274 Gly Ser Pro Ser Asp Leu Glu Asn Ala Thr Pro Lys Leu Phe Leu Glu
                                 120
  277 Gly Glu Lys Glu Ser Val Ser Pro Glu Ser Leu Lys Ser Ser Thr Ser
                                                140
         130
                             135
  280 Leu Thr Ser Glu Glu Lys Gln Glu Lys Leu Gly Thr Leu Phe Phe Ser
```

155

170

150

165

180

283 Leu Glu Tyr Asn Phe Glu Arg Lys Ala Phe Val Val Asn Ile Lys Glu

286 Ala Arg Gly Leu Pro Ala Met Asp Glu Gln Ser Met Thr Ser Asp Pro

289 Tyr Ile Lys Met Thr Ile Leu Pro Glu Lys Lys His Lys Val Lys Thr 200 292 Arg Val Leu Arg Lys Thr Leu Asp Pro Ala Phe Asp Glu Thr Phe Thr

185

RAW SEQUENCE LISTING DATE: 12/19/2003 PATENT APPLICATION: US/09/680,121C TIME: 16:00:51

Input Set : A:\Amended Sequence Listing for 107-206-C-D.txt

Output Set: N:\CRF4\12192003\I680121C.raw

```
215
293
        210
295 Phe Tyr Gly Ile Pro Tyr Thr Gln Ile Gln Glu Leu Ala Leu His Phe
                        230
                                            235
296 225
298 Thr Ile Leu Ser Phe Asp Arg Phe Ser Arg Asp Asp Ile Ile Gly Glu
                                        250
                    245
301 Val Leu Ile Pro Leu Ser Gly Ile Glu Leu Ser Glu Gly Lys Met Leu
                                    265
                260
304 Met Asn Arg Glu Ile Ile Lys Arg Asn Val Arg Lys Ser Ser Gly Arg
307 Gly Glu Leu Leu Ile Ser Leu Cys Tyr Gln Ser Thr Thr Asn Thr Leu
                                                 300
                            295
310 Thr Val Val Val Leu Lys Ala Arg His Leu Pro Lys Ser Asp Val Ser
                        310
                                            315
313 Gly Leu Ser Asp Pro Tyr Val Lys Val Asn Leu Tyr His Ala Lys Lys
                    325
                                        330
316 Arg Ile Ser Lys Lys Lys Thr His Val Lys Lys Cys Thr Pro Asn Ala
317
                340
                                    345
319 Val Phe Asn Glu Leu Phe Val Phe Asp Ile Pro Cys Glu Gly Leu Glu
                                360
320 355
322 Asp Ile Ser Val Glu Phe Leu Val Leu Asp Ser Glu Arg Gly Ser Arg
                            375
325 Asn Glu Val Ile Gly Gln Leu Val Leu Gly Ala Ala Ala Glu Gly Thr
                        390
                                            395
328 Gly Gly Glu His Trp Lys Glu Ile Cys Asp Tyr Pro Arg Arg Gln Ile
                    405
                                        410
331 Ala Lys Trp His Val Leu Cys Asp Gly
                420
336 <210> SEQ ID NO: 3
337 <211> LENGTH: 21
338 <212> TYPE: DNA
339 <213> ORGANISM: Homo sapiens
341 <220> FEATURE:
342 <221> NAME/KEY: misc feature
343 <222> LOCATION: (1)..(21)
344 <223> OTHER INFORMATION: 5' oligo (109) Upper Primer
346 <400> SEQUENCE: 3
                                                                       21
347 cagttttccc ttcagcacct c
350 <210> SEQ ID NO: 4
351 <211> LENGTH: 30
352 <212> TYPE: DNA
353 <213> ORGANISM: Homo sapiens
355 <220> FEATURE:
356 <221> NAME/KEY: misc feature
357 <222> LOCATION: (1)..(30)
358 <223> OTHER INFORMATION: 3' oligo (3489) Lower Primer
360 <400> SEQUENCE: 4
                                                                       30
361 ttcctttgtt gtttcttttc tcttttctga
364 <210> SEQ ID NO: 5
365 <211> LENGTH: 425
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 12/19/2003 PATENT APPLICATION: US/09/680,121C TIME: 16:00:52

Input Set : A:\Amended Sequence Listing for 107-206-C-D.txt

Output Set: N:\CRF4\12192003\1680121C.raw

## ase Note:

of n and/or Xaa have been detected in the Sequence Listing. Please review the uence Listing to ensure that a corresponding explanation is presented in the <220> <223> fields of each sequence which presents at least one n or Xaa.

```
#:11; Xaa Pos. 1,2,3,4,5,6,7,8

#:12; Xaa Pos. 1,2,3,4,5,6,7,8,9

#:13; Xaa Pos. 1,2,3,4,5,6

#:14; Xaa Pos. 1,2,3,4,5,6,7

#:15; Xaa Pos. 1,2,3,4,5,6,7,8,9

#:16; Xaa Pos. 1,2,3,4,5,6,7,8,9,10

#:17; Xaa Pos. 1,2,3,4,5,6,7,8

#:18; Xaa Pos. 1,2,3,4,5,6,7,8,9

#:19; Xaa Pos. 1,2,3,4,5,6,7,8,9

#:20; Xaa Pos. 1,2,3,4,5,6,7,8,9

#:27; Xaa Pos. 5
```

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/680,121C

Input Set : A:\Amended Sequence Listing for 107-206-C-D.txt
Output Set: N:\CRF4\12192003\I680121C.raw

DATE: 12/19/2003

TIME: 16:00:52

49 M:283 W: Missing Blank Line separator, <220> field identifier 46 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:11 55 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:11 64 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:11 73 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0 83 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12 92 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12 01 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12 10 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0 20 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:13 29 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:13 39 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0 49 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14 58 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:14 67 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0 77 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15 86 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15 96 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15 05 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15 14 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0 24 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16 33 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16 43 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16 52 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:16 61 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0 71 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:17 80 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:17 89 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:17 98 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0 08 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:18 17 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:18 26 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:18 35 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0 45 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19 54 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19 63 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19 72 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19 81 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0 91 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:20 000 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:20 009 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:20 018 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0 121 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:27

130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0